# UNITED STATES PATENT AND TRADEMARK OFFICE

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/836,952 | 04/17/2001 | Mehrban Jam | 10005248-1 | 6956 |

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HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

| EXAMINER |
|---|
| EHICHIOYA, FRED I |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2172 | |

DATE MAILED: 12/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) |
|---|---|---|
| **Office Action Summary** | 09/836,952 | JAM, MEHRBAN |
| | **Examiner** | **Art Unit** | |
| | Fred I. Ehichioya | 2172 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *08 September 2003*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1 - 26* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 - 26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

    a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)       4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)       5) ☐ Notice of Informal Patent Application (PTO-152)

3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .       6) ☐ Other: .

## DETAILED ACTION

### *Response to Arguments*

1. Response to communication filed on September 8, 2003

2. Claims 1 – 26 are pending in this office action.

3. Applicant amends claims 1 – 21 and 25.

4. Applicant's arguments with respect to claims 1 – 26 have been considered but

are moot in view of the new ground(s) of rejection.

### *Claim Rejections - 35 USC § 103*

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described
> as set forth in section 102 of this title, if the differences between the subject matter sought to
> be patented and the prior art are such that the subject matter as a whole would have been
> obvious at the time the invention was made to a person having ordinary skill in the art to which
> said subject matter pertains. Patentability shall not be negatived by the manner in which the
> invention was made.

6. Claims 1, 5, 7, 8, 10, 13, 16, 19, 21 and 26 are rejected under 35 U.S.C.

103(a) as being unpatentable over U.S. Patent 6,351,813 issued to David M.

Mooney et al. (hereafter "Mooney") in view of U.S. Patent 6,628,938 issued to

Sailesh Rachabathuni (hereinafter "Rachabathuni").


Regarding claims 1 and 13, Mooney teaches assigning database

information a plurality of clearance levels (see column 15, lines 23 – 25 and lines

45 – 58);

assigning each smart badge within a set of smart badges one of the

clearance levels (see column 11, lines 11 – 16 and column 16, lines 34 - 40);

identifying a lowest clearance level assigned to the smart badges with the

boundary (see column 16, lines 19 – 30); and

providing access (see column 1, lines 65 – 67) to that sub-set of the

database information having a clearance levels no higher than the lowest

identified clearance level on a computer located with the predefined physical

boundary (see Fig.1 and column 8, lines 21 – 55).

Mooney does not explicitly teach using a wireless beacon to detect which

smart badges are located with a predefined physical boundary.

However, Rachabathuni teaches using a wireless beacon to detect which

smart badges (see column 6, lines 53 – 67 and column 7, lines 1 – 43) are

located with a predefined physical boundary (see column 3, lines 26 – 35 and

column 5, lines 9 - 16).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify teaching of Rachabathuni with the teaching of

Mooney wherein the wireless beacon is configured to communicate with the

smart badge through the location server. The location server authenticates the

smart badge to give access within the specified security level. This access

control system includes communication means for providing proper

communications with a number of smart card readers and smart cards. The

motivation being that the system restricts access to, and ensures trusted security

of confidential, proprietary, classified, or other sensitive information contained in

files in the computer system.


Regarding claims 5 and 16, Mooney teaches providing access to smart

badge wearers assigned to the smart badges (see column 2, lines 8 – 11 and

column 12, lines 52 – 53).


Regarding claim 7, Mooney teaches writing data items to the smart

badges (see column 7, lines 14 – 16).


Regarding claim 8, Mooney teaches pre-reading the data item from the

smart badge during idle periods (see column 4, lines 66 – 67 and column 5, lines

1 – 9).


Regarding claims 10 and 19, Mooney teaches assigning an expiration

period to each of the smart badges (see column 5, lines 20 – 21); and

de-authenticating and erasing all data stored on a smart badge whose

expiration period has been exceeded (see column 9, lines 1 – 5 and column 9,

lines 17 – 22).

Regarding claim 21, Mooney teaches a database, including information differentiated by a plurality of clearance levels (see Mooney column 8, lines 20 – 24);

a set of smart badges (see Mooney column 16, line 49), detected by the first beacon to be within a predefined physical boundary, each badge assigned one of the clearance levels (see Mooney column 16, lines 34 – 59);

a computer located within the boundary (see Fig.1 and column 8, lines 53 – 55);

a system service module, coupled to the beacon, for identifying a lowest clearance level assigned to the smart badges within the boundary (see Mooney column 16, lines 29 – 30); and

a software application, coupled to the service module and the database, for providing access to information within the database having clearance levels no higher than the lowest clearance level (see Fig.1; column 1, lines 65 – 67 and column 8, lines 21 – 55).

Mooney does not explicitly teach a first wireless beacon; detected by the first beacon to be within a predefined physical boundary; a system service module, coupled to the beacon; a software application, coupled to the service module and the database.

Rachabathuni teaches a first wireless beacon (see Fig.1 step 5);

detected by the first beacon (Fig. 1 step 5) to be within a predefined physical boundary (see column 3, lines 26 - 31 and column 9, lines 7 – 26);

a system service module, coupled to the beacon (see column 5, lines 5 –
16);

a software application, coupled to the service module and the database
(see column 5, lines 5 – 20).

It would have been obvious to one of ordinary skill in the art at the time the
invention was made to modify teaching of Rachabathuni with the teaching of
Mooney wherein the wireless beacon is configured to communicate with the
smart badge through the location server. The location server authenticates the
smart badge to give access within the specified security level. This access
control system includes communication means for providing proper
communications with a number of smart card readers and smart cards. The
motivation being that the system restricts access to, and ensures trusted security
of confidential, proprietary, classified, or other sensitive information contained in
files in the computer system.

Regarding claim 26, Mooney teaches the application logs smart badge
wearers assigned to visible smart badges onto a computer (see column 9, lines 8
– 16).

7. Claims 2, 3, 4, 6, 9, 11, 12, 14, 15, 17, 18, 20, 24 and 25 are rejected under

   35 U.S.C. 103(a) as being unpatentable over Mooney in view of

   Rachabathuni and further in view U.S Patent 5,629,981 issued to Virupax M.

   Nerlikar (hereinafter "Nerlikar").


   Regarding claims 2 and 14, Mooney and Rachabathuni disclose the

claimed subject matter as discussed in claims 1 and 13 respectively. Mooney or

Rachabathuni does not explicitly teach defining those smart badges within the

boundary as a set of visible smart badges; and updating the set of visible smart

badges in response to a change in smart badge visibility status.

   Nerlikar teaches defining those smart badges within the boundary as a set

of visible smart badges (see column 8, lines 23 – 35); and

   updating the set of visible smart badges in response to a change in smart

badge visibility status (see column 13, lines 55 – 64).

   It would have been obvious to one of ordinary skill in the art at the time the

invention was made to combine teaching of Nerlikar with the teaching of Mooney

and Rachabathuni wherein user set for access for certain locations may be

dynamically changed. The motivation being that this update allows the user to

access new location without hindrance and access denied for unauthorized

locations.

Regarding to claims 3 and 15, Nerlikar teaches recalculating the lowest

clearance level in response to the change in smart badge visibility status (see

column 9, lines 50 – 56 and column 10, lines 43 – 48).


Regarding claim 4, Mooney and Rachabathuni disclose the claimed

subject matter as discussed in claim 2. Mooney or Rachabathuni does not

explicitly teach recording the smart badge visibility status of each smart badge

within an activity log.

Nerlikar teaches recording the smart badge visibility status of each smart

badge within an activity log (see column 2, lines 14 – 22 and column 4, lines 7 –

11).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to combine teaching of Nerlikar with the teaching of Mooney

and Rachabathuni wherein log is maintained to provide notification and

accountability. The motivation being that unauthorized accesses are denied.


Regarding claims 6 and 17, Nerlikar teaches preventing access to the

database when the smart badge visibility status is set to invisible for a

predetermined timeout (see column 13, lines 65 – 67).


Regarding claims 9 and 18, Mooney and Rachabathuni disclose the

claimed subject matter as discussed in claims 1 and 13 respectively. Mooney or

Rachabathuni does not explicitly teach defining a badge removal confidence

level indicating whether each smart badge has been continuously worn by

corresponding assigned smart badge wearers.

Nerlikar teaches the step of defining a badge removal confidence level

indicating whether each smart badge has been continuously worn by

corresponding assigned smart badge wearers (see column 8, lines 27 – 35).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to combine teaching of Nerlikar with the teaching of Mooney

and Rachabathuni wherein an unauthorized user has a limited access. The

motivation being that access to classified information or areas are controlled.


Regarding claim 11, Mooney and Rachabathuni disclose the claimed

subject matter as discussed in claim 1. Mooney or Rachabathuni does not

explicitly teach configuring a predetermined smart badge visibility range

Nerlikar teaches configuring a predetermined smart badge visibility range

(see column 13, lines 55 – 65).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to combine teaching of Nerlikar with the teaching of Mooney

and Rachabathuni wherein visibility range determines security access for each

user. The motivation being that access to classified information or areas are

controlled.

Regarding claims 12 and 20, Mooney teaches assigning database information a plurality of clearance levels (see column 15, lines 23 – 25 and lines 45 – 58);

assigning each smart badge within a set of smart badges one of the clearance levels (see column 11, lines 11 – 16 and column 16, lines 34 - 40);

identifying a lowest clearance level assigned to the smart badges with the boundary (see column 16, lines 19 – 30); and

providing access (see column 1, lines 65 – 67) to that sub-set of the database information having a clearance levels no higher than the lowest identified clearance level on a computer located with the predefined physical boundry (see Fig.1 and column 8, lines 21 – 55).

Mooney does not explicitly teach using a wireless beacon to detect which smart badges are located with a predefined physical boundary; updating the set of visible smart badges in response to a change in smart badge visibility status; and recalculating the lowest clearance level in response to the change in smart badge visibility status.

However, Rachabathuni teaches using a wireless beacon to detect which smart badges (see column 6, lines 53 – 67 and column 7, lines 1 – 43) are located with a predefined physical boundary (see column 3, lines 26 – 35 and column 5, lines 9 - 16).

Nerlikar teaches defining those smart badges within the boundary as a set of visible smart badges (see column 8, lines 23 – 35);

updating the set of visible smart badges in response to a change in smart

badge visibility status (see column 13, lines 55 – 64); and

recalculating the lowest clearance level in response to the change in smart

badge visibility status (see column 9, lines 47 – 56 and column 10, lines 42 – 48).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify teaching of Rachabathuni and Nerlikar with the

teaching of Mooney wherein the wireless beacon is configured to communicate

with the smart badge through the location server. The location server

authenticates the smart badge to give access within the specified security level.

This access control system includes communication means for providing proper

communications with a number of smart card readers and smart cards. The

motivation being that the system restricts access to, and ensures trusted security

of confidential, proprietary, classified, or other sensitive information contained in

files in the computer system.


Regarding claim 24, Mooney and Rachabathuni disclose the claimed

subject matter as discussed in claim 21. Mooney teaches biometric sensors (see

column 9, lines 33 – 36). Mooney or Rachabathuni does not explicitly teach

biometric sensor detecting when a smart badge has been removed from an

assigned smart badge wearer.

Nerlikar teaches detecting when a smart badge has been removed from

an assigned smart badge wearer (see column 8, lines 26 – 32).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine teaching of Nerlikar with teaching of Mooney and Rachabathuni wherein biometric sensor detects accesses to both authorized and unauthorized locations. If a badge is stolen or the user moves to an unauthorized location, the access would be denied. The motivation being that the system provides a real-time configuration and security control.

Regarding claim 25, Nerlikar teaches the service module defines those smart badges within the boundary as a set of visible smart badges (see column 8, lines 23 – 35), and

recalculates the lowest clearance level in response to a change in the visibility status (see column 9, lines 47 – 56 and column 10, lines 42 – 48).

8.  Claims 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mooney in view of Rachabathuni and further in view of U.S. Patent 5,917,425 issued to James W. Crimmins et al (hereinafter "Crimmins").

Regarding to claim 22, Mooney and Rachabathuni disclose the claimed subject matter as discussed in claim 21. Mooney or Rachabathuni does not explicitly teach a wide angle RF beacon.

Crimmins teaches a wide angle RF beacon (see column 6, lines 10 – 11 and lines 40 – 48).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to combine teaching of Crimmins with teaching of Mooney

and Rachabathuni wherein wide angle RF beacon is more effective in detecting

small infrared signal of portable device. The motivation is that the wide RF

beacon is more sensitive to a position change.


Regarding claim 23, Crimmins teaches a second diffuse IR beacon,

coupled to the service module, limited to detecting smart badges within a

workroom (see column 6, lines 15 – 16).


### *Conclusion*

9.  Applicant's amendment necessitated the new ground(s) of rejection presented

in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in

37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire

THREE MONTHS from the mailing date of this action. In the event a first reply is

filed within TWO MONTHS of the mailing date of this final action and the advisory

action is not mailed until after the end of the THREE-MONTH shortened statutory

period, then the shortened statutory period will expire on the date the advisory

action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be

calculated from the mailing date of the advisory action. In no event, however, will

the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred I. Ehichioya whose telephone number is 703-305-8039. The examiner can normally be reached on M - F 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y. Vu can be reached on 703-305-4393. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7239 for regular communications and 703-746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-303-3900.

Fred Ehichioya
November 25, 2003

SHAHID ALAM
PRIMARY EXAMINER